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**CONSOLIDATED CONSENT AGREEMENT/
FEDERAL FACILITY COMPLIANCE AGREEMENT
MONTHLY PROGRESS REPORT PERIOD ENDING
MARCH 31, 1991**

03/31/91

**DOE-FMPC/USEPA/OEPA
47
REPORT**

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**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

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Introduction

The Consent Agreement (CA) under the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) Section 120 and 106(a) and the Federal Facility Compliance Agreement (FFCA) between the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (U.S. EPA), signed April 9, 1990 and July 18, 1986, respectively, require that monthly reports be submitted to the U.S. EPA regarding progress made to meet the provisions of those agreements. This report fulfills those requirements by describing actions undertaken at the Feed Materials Production Center (FMPC) during the period March 1 through March 31, 1991 and planned actions for the period April 1 through April 30, 1991.

Work completed in March by the DOE includes the submittal of the following:

- Responses to the U.S. EPA comments on the Plant 1 Pad Continuing Release Removal Action Work Plan were submitted to the U.S. EPA on March 1, 1991.
- The South Plume Removal Action Work Plan for Parts 2 and 3 was submitted to the U.S. EPA on March 11, 1991.
- The Design Basis Document for the Interim Advanced Wastewater Treatment (IAWWT) System was submitted to the U.S. EPA for informational purposes on March 19, 1991.
- The outline called for by the Dispute Resolution Agreement for the Initial Screening of Alternatives Report for Operable Unit 3 was submitted to the U.S. EPA on March 25, 1991.
- Responses to the U. S. EPA conditions/modifications on the Waste Pit Area Runoff Control Removal Action Work Plan were submitted on March 5, 1991.

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WORK ASSIGNMENTS AND PROGRESS

Descriptions of work progress are presented in the following sections and/or enclosures to this report:

- o CA Section IX - Removal Actions
- o CA Section X - Remedial Investigation/Feasibility Study
- o Enclosure A - Wastewater flows and radionuclide concentrations under CA Section XXIII.B
- o Enclosure B - FFCA: Initial Remedial Measures and Other Open Actions
- o Enclosure C - Drilling/Boring Logs

CA Section IX. Removal Actions

This section provides an update of activities associated with the implementation of Removal Actions (RAs) at the FMPC during March 1991. Information is presented for each of the four removal actions identified in the Consent Agreement, and the two recently agreed upon Removal Actions, including the following:

- o RA No. 1, Contaminated Water Beneath FMPC Buildings.
- o RA No. 2, Waste Pit Area Runoff Control.
- o RA No. 3, South Groundwater Contamination Plume.
- o RA No. 4, Silos 1 and 2.
- o RA No. 5, K-65 Decant Sump Tank.
- o RA No. 6, Plant 1 Pad Continuing Release.

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RA No. 1, Contaminated Water Beneath FMPC Buildings

Plant 6 - Groundwater pumping activities from the three (3) wells and the clarifier pit remained curtailed during March. Analytical results from Volatile Organic Compounds/Hazardous Substance List (VOC/HSL) sampling have been received from the laboratory. Activities required to design, procure, install, start-up, and operate the Plant 6 perched water extraction system continued on schedule. The final design for piping modification to ensure perched water segregation from other Plant 6 wastewater stress was submitted for DOE/FMPC approval in March 1991.

Plants 2/3 and Plant 9 - The preliminary engineering necessary to locate and design the extraction and treatment systems specified within the approved work scope continued on schedule. Development of the documentation to support the solicitation of engineering services from the DOE CERCLA Program Architect/Engineer was completed in December 1990. Engineering activities associated with the detailed design and procurement of piping and equipment to support the removal and treatment of contaminated perched water beneath Plant 9, Plants 2/3 and Plant 8 are underway. The ninety percent design drawings and specifications for Plants 2/3 and 9 extraction systems are scheduled for completion in April 1991.

Activities in April will focus on the procurement of materials for the Plant 8 treatment system and the installation of the modified piping and collection systems in Plant 6. Construction activities for Plants 6 and 8 are scheduled to start in April. If Plants 6 and 8 Construction is initiated on schedule, all activities will be on schedule to support the deliverables identified in the three U.S. EPA approved Removal Action Work Plans.

RA No. 2, Waste Pit Area Runoff Control

The Waste Pit Area Runoff Control Engineering Evaluation/Cost Analysis (EE/CA) was conditionally approved by the U.S. EPA and the Ohio EPA on September 12, 1990.

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RA No. 2, Waste Pit Area Runoff Control (cont'd.)

The U.S. EPA issued a letter on November 13, 1990 disapproving the Work Plan. Deficiencies cited by the U.S. EPA were incorporated into the Work Plan and the Work Plan was resubmitted on schedule to the U.S. EPA on December 13, 1990. Late comments were received from the Ohio EPA the week of November 19, 1990. These comments were also resolved and reflected in the Work Plan. Conditional U.S. EPA approval of the revised work plan with modifications pertaining to sampling requirements was received on January 10, 1991. The conditions for full approval of the work plan involve details associated with Quality Assurance Program Plan (QAPP) certified analysis of samples and specific buildover criteria for HSLs. The Ohio EPA reviewed the modified sampling and analysis plan and issued conditional approval based on the satisfactory resolution of questions concerning Section 1.0, Pre-Excavation Soil Sampling, in the Revised Sample Analysis Plan (SAP). Issues raised include the concern over the volatilization of VOCs that may be encountered after the first six inches of the surface soil, laboratory quantification limits, the source for background concentrations of heavy metals, and the use of the Extraction Procedure (EP) toxicity test in place of Toxicity Characteristic Leaching Procedure (TCLP).

In order to satisfy one of the conditions stipulated by the U.S. EPA for the approval of the Waste Pit Area Runoff Control EE/CA, Permeability Studies in the Waste Pit Area were initiated. These tests will determine if the clays in the detention area will meet the required maximum permeability of 1×10^{-7} cm/sec. Required permeability test samples were collected during January and analytical work was initiated.

Work on the development of construction bid packages for the removal action by RUST Engineering is in the final stages and final preparations are being made for bid award.

Planned activities in April include the following: (1) Incorporate final sampling modifications into the work plan for QAPP approved analysis of post and pre-excavation samples and development of specific HSL buildover criteria as directed by the U.S. EPA; and (2) complete preparation of initial construction field activities in order to start work in late April.

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RA No. 2, Waste Pit Area Runoff Control (cont'd.)

| <u>KEY MILESTONES</u> | <u>STATUS</u> | <u>DUE DATE</u> |
|---|----------------------|-------------------|
| Receive U.S. EPA comments/approval on the Waste Pit Area Runoff Control Work Plan | Completed | November 13, 1990 |
| Issue the revised Waste Pit Area Runoff Control Work Plan to the U.S. EPA | Completed | December 13, 1990 |
| Transmit response to the U.S. EPA proposed modification to the Work Plan | Completed | March 5, 1991 |
| Receive the Ohio EPA comments on the Revised SAP with conditional approval | Open, On schedule | April 4, 1991 |
| Initiate construction mobilization for removal action field activity | Open, On schedule | April 30, 1991 |

RA No. 3, South Groundwater Contamination Plume

The Work Plan for Part 1 (alternate water supply for two industrial users) of the South Plume Removal Action was approved by the U.S. EPA on January 3, 1991. The Ohio EPA approved the Work Plan for Part 1 provided that two comments were satisfactorily resolved. The response to these two comments will be similar to the language in the recently submitted Part 2 Work Plan. Therefore, a response will be issued after the Part 2 comments are received from the U.S. EPA and the Ohio EPA. The Army Corps of Engineers (COE) reached agreement with the owner of the property where the Part 1 test well is to be installed. The COE has obtained deed information on the properties where the alternate water supply mains are to be located.

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RA No. 3, South Groundwater Contamination Plume (cont'd.)

The Work Plans for Part 2 (pump from leading edge of South Plume and discharge to Great Miami River) and Part 3 (the installation and operation of an Interim Advanced Wastewater Treatment [IAWWT] Unit to reduce contaminant loading discharged to the Great Miami River to a level less than 1,700 pounds per year) was prepared as one Work Plan and submitted to the U.S. EPA on December 17, 1990. The Work Plan for Parts 2 and 3 of the South Plume Removal Action was disapproved by the U.S. EPA on January 17, 1991. The Ohio EPA comments were received on January 18, 1991. The revised work plan for Parts 2 and 3 of the South Plume Removal Action was submitted to the U.S. EPA for approval on March 11, 1991. The work plan was also revised to include a new outfall pipeline. The new outfall pipeline is being proposed in lieu of repairing the existing outfall line.

The preliminary drawings for Part 2 were issued to the U.S. EPA for informational purposes on February 6, 1991.

A meeting was held on February 8, 1991 at the Ohio EPA Dayton office to discuss key comment items and FMPC's initial responses. The U.S. EPA, although invited, did not attend the meeting. Several changes resulted from the meeting and were reflected in the revised Work Plan and responses to comments. The Ohio EPA stated that, based on the latest groundwater information discussed at a meeting held on February 1, 1991 at Advanced Sciences, Inc. (ASI) offices, relocation of the well field to the north should be considered.

A second meeting was held February 20, 1991 at the Ohio EPA Dayton office. The U.S. EPA and the Paddy's Run Road Site (PRRS) representatives were in attendance. A discussion on relocating the well field determined that, if possible, the well field should be moved north to minimize impact on the PRRS plume. The Work Plan was revised to reflect an evaluation of this relocation.

Due to the delay required to evaluate relocating the well field, the project was split into two construction packages. The first package will contain the transfer pump station, groundwater discharge pipeline, outfall pipeline, and associated appurtenances. This package, which is the most time consuming to construct, will remain on the original schedule. Construction will be delayed on the well field package until the issues on the well field relocation are resolved.

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RA No. 3, South Groundwater Contamination Plume (cont'd.)

A letter was issued to the U.S. EPA on February 15, 1991, entitled, "Installation of a New Effluent Line and its Incorporation into the South Plume Removal Action." The letter summarized a recently completed study which indicated that the DOE would not attempt to repair the existing outfall pipeline but would instead replace the existing line with a new pipeline. The DOE also stated that a twenty-day extension was needed to make the necessary changes to the Work Plan to reflect this decision.

Activities in March included continuation of design work for and working with the Corps of Engineers to obtain easements for Parts 1 and 2. The Design Basis Document for the IAWWT, Part 3, was issued to the U.S. EPA for informational purposes on March 19, 1991.

Activities in April will focus on the continuation of the evaluation to determine where to move the well field. Design work which will contain the revised work plan for Parts 2 and 3, is expected to be approved. An addendum to Part 2 Work Plan is scheduled to be revised and will address the Ohio EPA comments.

| <u>KEY MILESTONES</u> | <u>STATUS</u> | <u>DUE DATE</u> |
|--|---------------|-------------------|
| Issue Part 1 Revised Work Plan to U.S. EPA for approval | Completed | December 5, 1990 |
| Issue Parts 2 & 3 Work Plan to the U.S. EPA for review/approval | Completed | December 17, 1990 |
| Part 1 Revised Work Plan approved by U.S. EPA | Completed | January 3, 1991 |
| Issue Revised Work Plan for Parts 2 & 3 to U.S. EPA for approval | Completed | March 11, 1991 |
| Issue Design Basis Document for IAWWT to the U.S. EPA for informational purposes | Completed | March 19, 1991 |

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RA No. 3, South Groundwater Contamination Plume (cont'd.)

| <u>KEY MILESTONES</u> | <u>STATUS</u> | <u>DUE DATE</u> |
|--|---------------|-----------------|
| Issue revised Part 1 Addendum to address Ohio EPA comments | Open | April 8, 1991 |
| Parts 2 & 3 Revised Work Plan approved by U.S. EPA | Open | April 12, 1991 |

RA No. 4, Silos 1 and 2

The Silos 1 and 2 Removal Action Work Plan was submitted to the U.S. EPA on November 5, 1990. The U.S. EPA approval of the Silos 1 and 2 Removal Action Work Plan was received on November 30, 1990.

The Application Demonstration Program to determine the physical properties of the commercial product, Bento-Grout, was performed by American Colloid Company at their facilities in Sandy Ridge, Alabama.

The detailed design efforts necessary to implement the Removal Action are approximately 50% complete.

Work in April will center on the design efforts for the Removal Action with special attention given to the design package for the bentonite application sprayhead. Also, the field activities associated with modifying the Radon Treatment System (RTS) will be initiated.

RA No. 5, K-65 Decant Sump Tank

The K-65 Decant Sump Tank Removal Action Work Plan was submitted to the U.S. EPA for approval on December 10, 1990. The U.S. EPA conditional approval of the K-65 Decant Sump Tank Removal Action Work Plan was received on January 10, 1991. The responses to the issues included in the conditional approval were submitted to the U.S. EPA on February 8, 1991. A revised implementation schedule was included in these responses.

During March, the field activities required to initiate pumping activities for the implementation of the K-65 Decant Sump Tank Removal Action were completed. Pumping and removal of the decant liquid was initiated on March 26, 1991.

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RA No. 5, K-65 Decant Sump Tank (cont'd.)

Work in April will focus on the completion of the pumping activities following the sampling of the loaded tanker trailer and the transfer of the liquid to the holding tanks in Plants 2/3.

RA No. 6, Plant 1 Pad Continuing Release

The Plant 1 Pad Continuing Release Removal Action Work Plan was submitted to U.S. EPA and the Ohio EPA on December 4, 1990. Responses to the U.S. EPA comments on the Work Plan were prepared and submitted on March 1, 1991. The removal action consists of three phases. Phase I implements the run-on/run-off control measures. Phase II addresses the installation of 80,000 square feet of a new covered and controlled concrete storage pad. Phase III involves activities to upgrade the remaining 375,000 square feet of the existing Plant 1 storage pad. Upgrading activities include installation of a polymeric vapor barrier over the existing concrete and the installation of concrete above the barrier with epoxy sealant. In addition, 22,000 square feet of the Phase II work area will be enclosed beneath a Sprung structure.

Activities in April, pending U.S. EPA approval of comment responses, will include additional sampling and analysis to characterize HSL contaminants for the Phase II work area. Subject to the receipt of analytical results, construction of Phase I and II will be initiated in May.

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CA Section X. Remedial Investigation and Feasibility Study (RI/FS)

This section provides an update on RI/FS Operable Units (OUs), Community Relations and Field Activities for March 1991. Status information is presented for each of the five Operable Units (OUs) identified in the Consent Agreement. The five Operable Units are described below:

- o Operable Unit 1 (OU 1): Waste Pits 1-6, clearwell, burn pit.
- o Operable Unit 2 (OU 2): Other Waste Units - (fly ash piles, lime sludge).
- o Operable Unit 3 (OU 3): Production area and suspect areas outside production area (including effluent line to Great Miami River).
- o Operable Unit 4 (OU 4): Silos 1, 2, 3, and 4.
- o Operable Unit 5 (OU 5): All environmental media (i.e., including groundwater, surface water, soils, air, flora, fauna, etc.).

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Operable Unit 1: Waste Pits 1 - 6, Burn Pit, and Clearwell

1.1 Remedial Investigation

a. Status of Work - Key Milestones

Submittal of the Operable Unit 1 Remedial Investigation (RI) Report has been delayed pending completion of the additional waste unit sampling.

Activity

Comments

Issue draft Remedial Investigation Report to the U. S. EPA

Open, additional work identified.

b. Issues/Problems

The U.S. EPA and the DOE are in disagreement over whether or not the additional pit sampling constitutes additional work under the provisions of the Consent Agreement.

c. Corrective Actions

The DOE submitted a letter to the U.S. EPA on March 26, 1991 invoking dispute resolution over U.S. EPA's disapproval of the OUI sampling as additional work under the Consent Agreement.

d. Planned Activities for April 1991

Continue work on the implementation of the Work Plan Addendum (Additional Pit Sampling).

Prepare a revised schedule for delivery of the RI Report incorporating the additional site characterization.

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Operable Unit 1: Waste Pits 1 - 6, Burn Pit, and Clearwell

1.2 Feasibility Study

a. Status of Work - Key Milestones

Submittal of the Feasibility Study (FS) Report has been delayed pending completion of the additional waste unit sampling and treatability studies.

Activity

Comment

Issue draft Feasibility Study
Report to the U.S. EPA

Open,
additional work
identified.

b. Issues/Problems

The U.S. EPA and the DOE are in disagreement over whether or not the additional waste pit sampling meets the definition of additional work as defined in the Consent Agreement.

c. Corrective Actions

The DOE submitted a letter to the U.S. EPA on March 26, 1991 invoking dispute resolution over U.S. EPA's disapproval of the OUI sampling as additional work under the Consent Agreement.

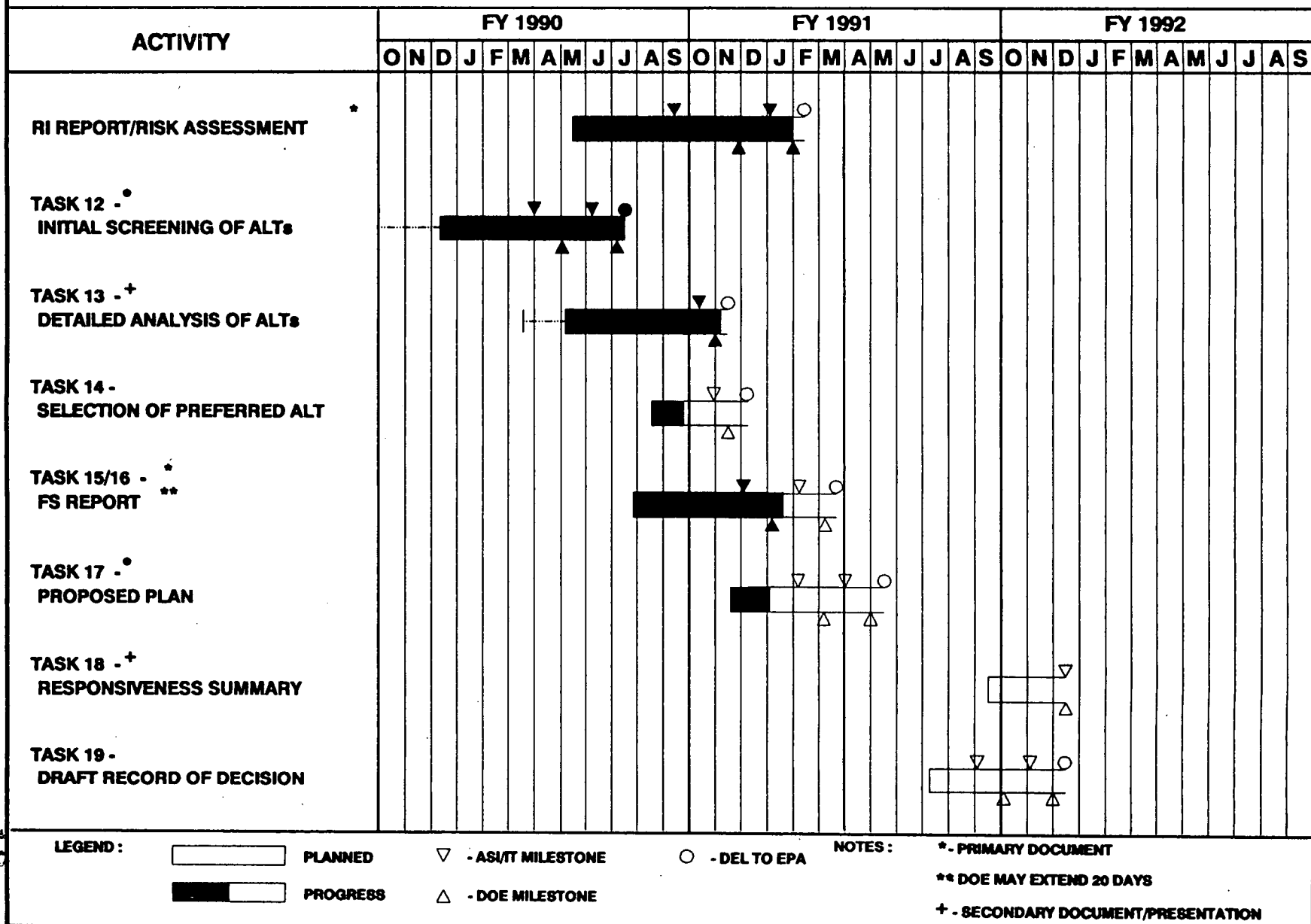
d. Planned Activities for April 1991

Prepare a revised schedule for delivery of the FS Report that incorporates the additional site characterization data and treatability results.

Prepare a treatability work plan for cement stabilization and vitrification technology.

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FMPC RI/FS FFA TRACKING
OPERABLE UNIT 1 - WASTE STORAGE AREA



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Operable Unit 2: Other Waste Units

2.1 Remedial Investigation

a. Status of Work - Key Milestones

Submittal of the Operable Unit 2 RI Report has been delayed pending completion of additional source characterization and incorporation of this information into the report.

Activity

Comment

Issue draft RI Report
to the U.S. EPA

Open,
on hold;
additional work
identified.

b. Issues/Problems

The Ohio EPA has requested that an additional boring be placed in the Sanitary Landfill for the work plan addendum. During the dispute resolution of the Operable Unit 2 Initial Screening of Alternatives (ISA) Report, it was agreed that the DOE would place the additional boring. A modification was also made to the work plan addendum to perform a simulated rainwater leach procedure on the waste as a substitute for analyzing leachate when none is encountered. This modification has been sent to the U.S. EPA and the Ohio EPA for review and approval.

The U.S. EPA and the DOE are in disagreement over whether or not the additional waste units sampling meets the definition of additional work as defined in the Consent Agreement.

c. Corrective Actions

The impact of the cost associated with the additional boring has been addressed and resolved. Preparations for commencement of sampling activities are proceeding. A revised work plan is being reviewed internally.

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Operable Unit 2: Other Waste Units

2.1 Remedial Investigation

c. Corrective Actions (cont'd.)

The DOE submitted a letter to the U.S. EPA on March 26, 1991 invoking dispute resolution over U.S. EPA's disapproval of the OU2 sampling as additional work under the Consent Agreement.

d. Planned Activities for April 1991

Initiate sampling activities.

2.2 Feasibility Study

a. Status of Work - Key Milestones

A meeting between the U.S. EPA and the DOE was held in Chicago on March 12, 1991 to discuss the dispute on the Operable Unit 2 Initial Screening of Alternatives (ISA) Report. In a letter dated March 18, 1991, the U.S. EPA notified DOE that the dispute was resolved. It was agreed that the remedial action goals stated in the draft final ISA will remain as stated in the final version. However, a caveat was to be added stating that the remedial action goals were preliminary and remain under review. The DOE will submit a work plan to the U.S. EPA outlining the methodology to be used in establishing these goals as well as the preliminary proposed cleanup levels. The DOE is also to address the point of compliance issue in the final ISA for Operable Unit 2.

Work on the Detailed Analysis of Alternatives, draft FS and Proposed Plan/Record of Decision is on hold. An evaluation of the impact of performing the additional sampling contained in the work plan addendum and the rescheduling of RI/FS activities associated with Operable Unit 2 is continuing.

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Operable Unit 2: Other Waste Units

2.2 Feasibility Study (con't.)

a. Status of Work - Key Milestones (cont'd.)

| <u>Activity</u> | <u>Comment</u> |
|--|-------------------|
| Issue Final Initial Screening of Alternatives Report to the U.S. EPA on April 18, 1991 | On schedule |
| Present Detailed Analysis of Alternatives to the U.S. EPA | Open, On hold |
| Issue draft Feasibility Study Report to the U.S. EPA | Open, On hold. |

b. Issues/Problems

The U.S. EPA and the DOE are in disagreement over whether or not the additional waste units sampling meets the definition of additional work as defined in the Consent Agreement.

c. Corrective Actions

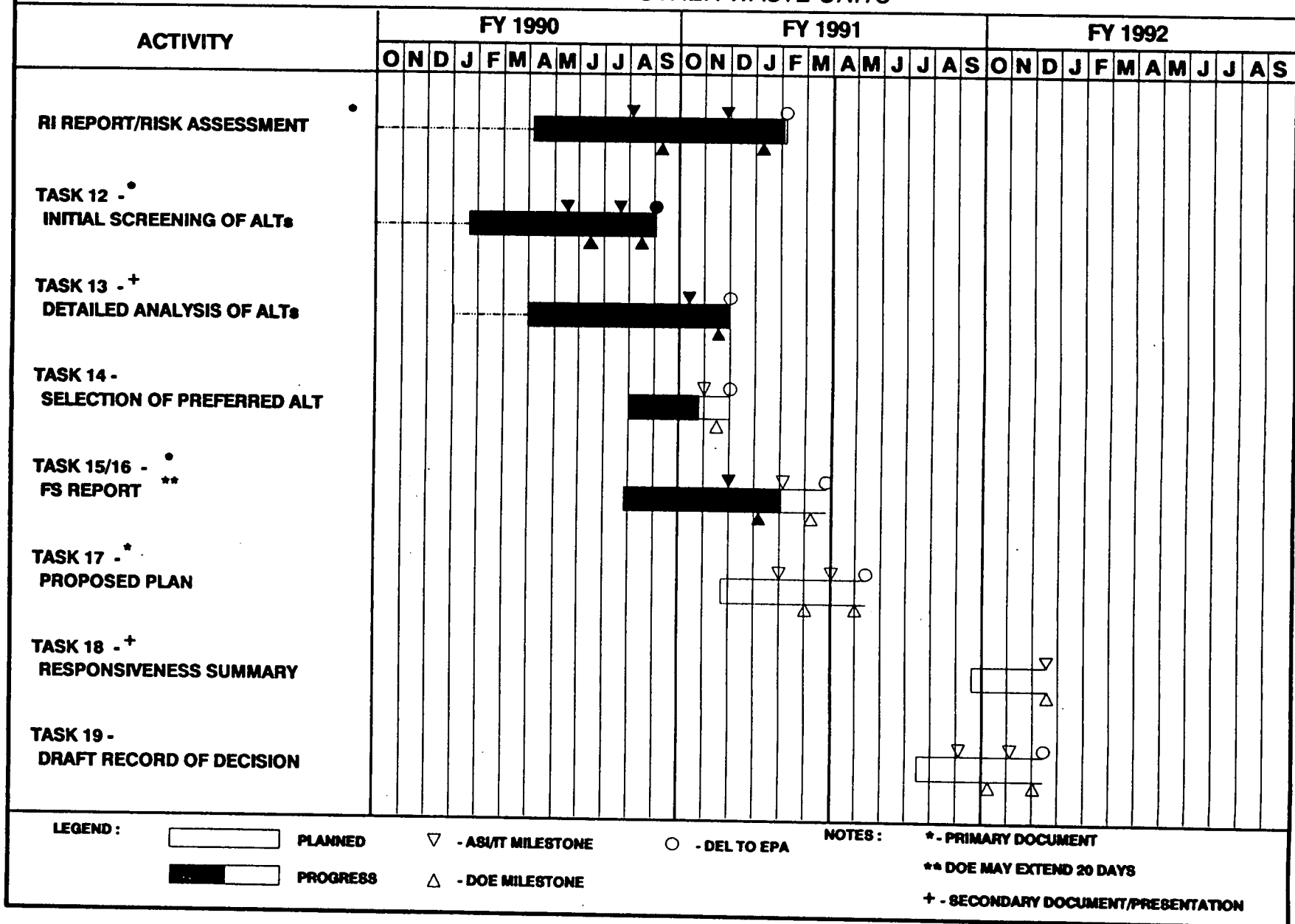
The DOE submitted a letter to the U.S. EPA on March 26, 1991 invoking dispute resolution over the U.S. EPA's disapproval of the OU2 sampling as additional work under the Consent Agreement.

d. Planned Activities for April 1991

Complete the ISA revision for submittal to the U.S. EPA.

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FMPC RI/FS FFA TRACKING
OPERABLE UNIT 2 - OTHER WASTE UNITS



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Operable Unit 3: Production Area and Suspect Areas

3.1 Remedial Investigation

a. Status of Work - Key Milestones

On March 4, 1991, an agreement was reached between the DOE and the U.S. EPA concerning the Operable Unit 3 ISA Report formal dispute resolution. As a result of this process, the Operable Unit 3 scope will be revised to address all facilities and utilities, waste and product inventories, tanks, storage areas, etc. in the production and suspect areas. The major emphasis for Operable Unit 3 work is on defining the Operable Unit scope and the development of plans, schedules, and budgets for the additional scope of work necessitated by the dispute resolution agreement. In order to expedite this process, a team of representatives from DOE, its contractors, and subcontractors has been assembled to address these issues.

Continuing RI work includes the following: determining the effect of the storm sewer system on perched groundwater contamination, integrating time-critical removal actions into the RI, continuing the analysis of the perched groundwater zones, and determining the criteria for consideration of these zones as potable water sources. In addition, research of Atomic Energy Commission/Department of Energy (AEC/DOE) archives continues and interviews with current and retired employees are being planned to collect evidence on the existence of a potential vault in the north flagpole area. When this research is completed, modeling of the observed magnetic gradients, which were defined last summer, will be initiated.

| <u>Activity</u> | <u>Comment</u> |
|---|--|
| Issue Draft RI Report to the U.S. EPA on April 8, 1991. | Open, ISA dispute resolution will result in a new schedule |

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Operable Unit 3: Production Area and Suspect Areas

3.1 Remedial Investigation

b. Issues/Problems

None to report.

c. Corrective Actions

None required.

d. Planned Activities for April 1991

Continue the following activities: the scheduling, budgeting, and planning related to the expanded Operable Unit 3 work scope; preparation of work plans relative to additional field programs necessary to fully characterize the soils and perched groundwater within the production and suspect areas, determining the effect of the storm sewer system on perched groundwater contamination, integrating removal actions into the RI; and the analysis of the perched groundwater zones and determining the criteria for consideration of these zones as potable water sources.

3.2 Feasibility Study

a. Status of Work - Key Milestones

On March 4, 1991, an agreement was reached between the DOE and the U.S. EPA concerning the Operable Unit 3 ISA report formal dispute resolution. As a result of this process, the Operable Unit 3 work scope will be revised to address all facilities and utilities, waste and product inventories, tanks, storage areas, etc., in the production and suspect areas. One provision of the dispute resolution agreement defined an outline of the ISA Report, based on the expanded scope of work, as a U.S. EPA deliverable. The deliverable was submitted to the U.S. EPA on March 25, 1991. The major focus for Operable Unit 3 work will be on defining the operable unit work scope and the development of plans, schedules, and budgets for the additional work scope necessitated by the dispute resolution agreement.

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Operable Unit 3: Production Area and Suspect Areas

3.2 Feasibility Study

a. Status of Work - Key Milestones (cont'd.)

In order to expedite this process, a team of representatives from DOE, its contractors, and subcontractors has been assembled to address these issues.

Operable Unit 3 FS work on the Detailed Analysis of Alternatives presentation and the FS report were discontinued in March 1991. The incorporation of the tentative understandings on ISA issues reached at the January 22, 1991 informal dispute resolution meeting was that only ISA work continued during March. Work continued in March included the initial screening of 23 alternatives consisting of process options for addressing a portion of the Operable Unit 3 contaminants.

| <u>Activity</u> | <u>Comment</u> |
|--|---|
| Issue Draft Final Initial Screening of Alternatives Report to the U.S. EPA | Open, formal dispute resolution complete. ISA outline submitted. |
| Present Detailed Analysis of Alternatives to the U.S. EPA | Open, On hold; ISA dispute resolution will result in a new schedule. |
| Issue draft FS report to the U.S. EPA | Open, On hold; ISA dispute resolution will result in a new schedule. |

b. Issues/Problems

None to report.

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Operable Unit 3: Production Area and Suspect Areas

3.2 Feasibility Study (cont'd.)

c. Corrective Actions

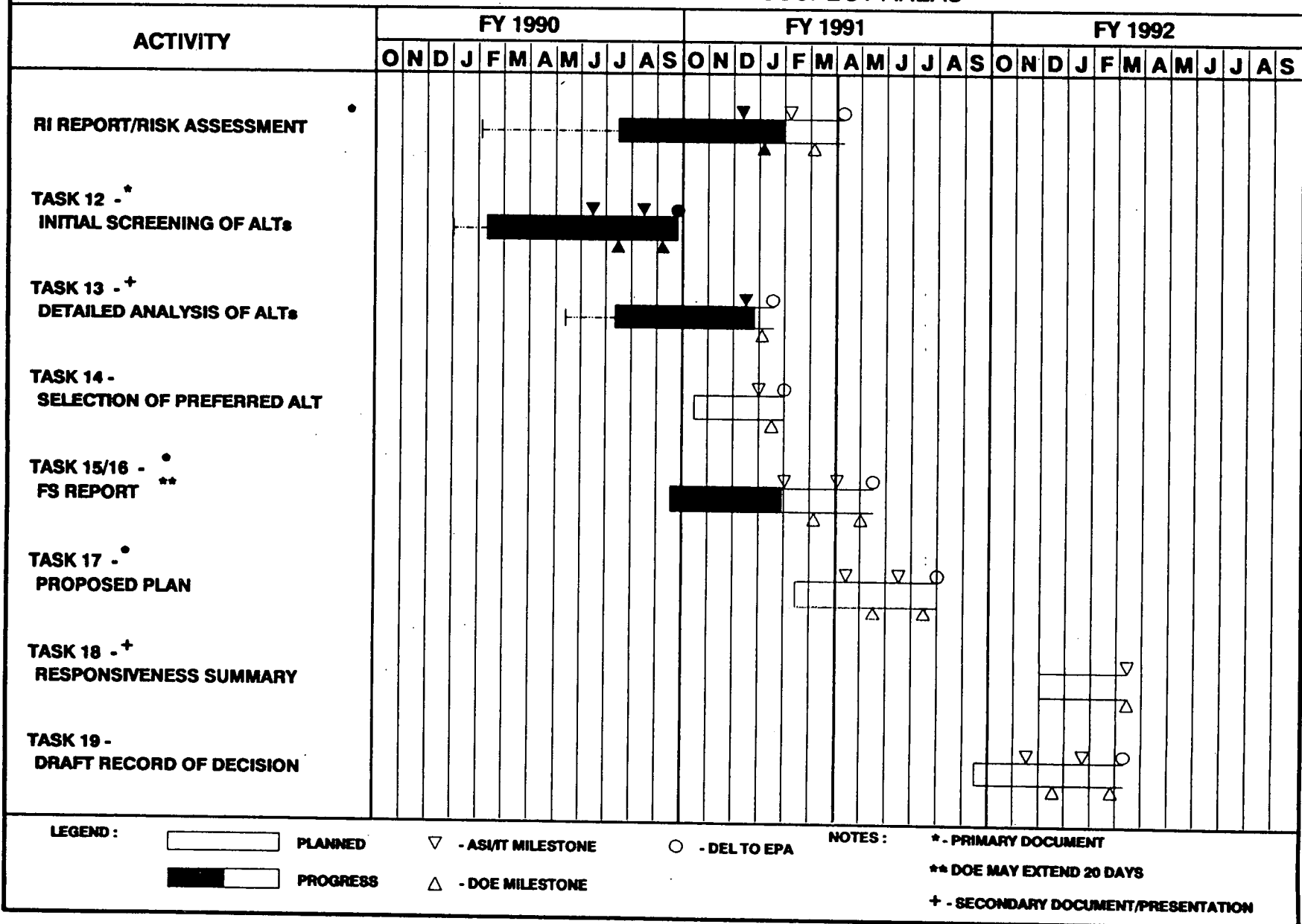
None required.

d. Planned Activities for April 1991

Continue the scheduling, budgeting, and planning related to the expanded Operable Unit 3 work scope. Complete the incorporation of the 23 alternatives based on process options in the ISA report. Note that completion of this work will not address any of the additional work scope items resulting from the formal dispute resolution agreement.

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FMPC RI/FS FFA TRACKING
OPERABLE UNIT 3 - PRODUCTION AND SUSPECT AREAS



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Operable Unit 4: Silos 1, 2, 3, and 4

4.1 Remedial Investigation

a. Status of Work - Key Milestones

Work on the RI report is on hold awaiting the conclusion of the site characterization program for OU4. A treatability study work plan was prepared for internal review and review comments are being incorporated as appropriate as they are received.

b. Issues/Problems

The current sampling and analysis schedule will delay the incorporation of analytical data into the OU4 RI report. With the exception of the baseline risk assessment, all work has been suspended.

c. Corrective Actions

Priority has been given to OU4 in the sampling program. Meanwhile, work is underway to determine if some mechanism exists within the regulatory framework to advance the remedial action.

d. Planned Activities for April 1991

Conduct field activities on the slant boring and berm sampling programs in April.

Incorporate the revised groundwater constituent fate and transport modeling into the RI report.

Develop position papers on the need for further characterization in the OU4 area.

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

Period Ending March 31, 1991

Operable Unit 4: Silos 1, 2, 3, and 4

4.2 Feasibility Study

a. Status of Work - Key Milestones

A complete revision of the FS report was completed in March 1991. The revision, which was based upon previous comments and internal review, incorporated the bentonite removal action design, vitrification as the solidification option, and a comprehensive revised cost estimate consistent with the new designs.

b. Issues/Problems

Submittal of the Feasibility Study and subsequent documents is on hold pending the approval of the RI Report.

c. Corrective Actions

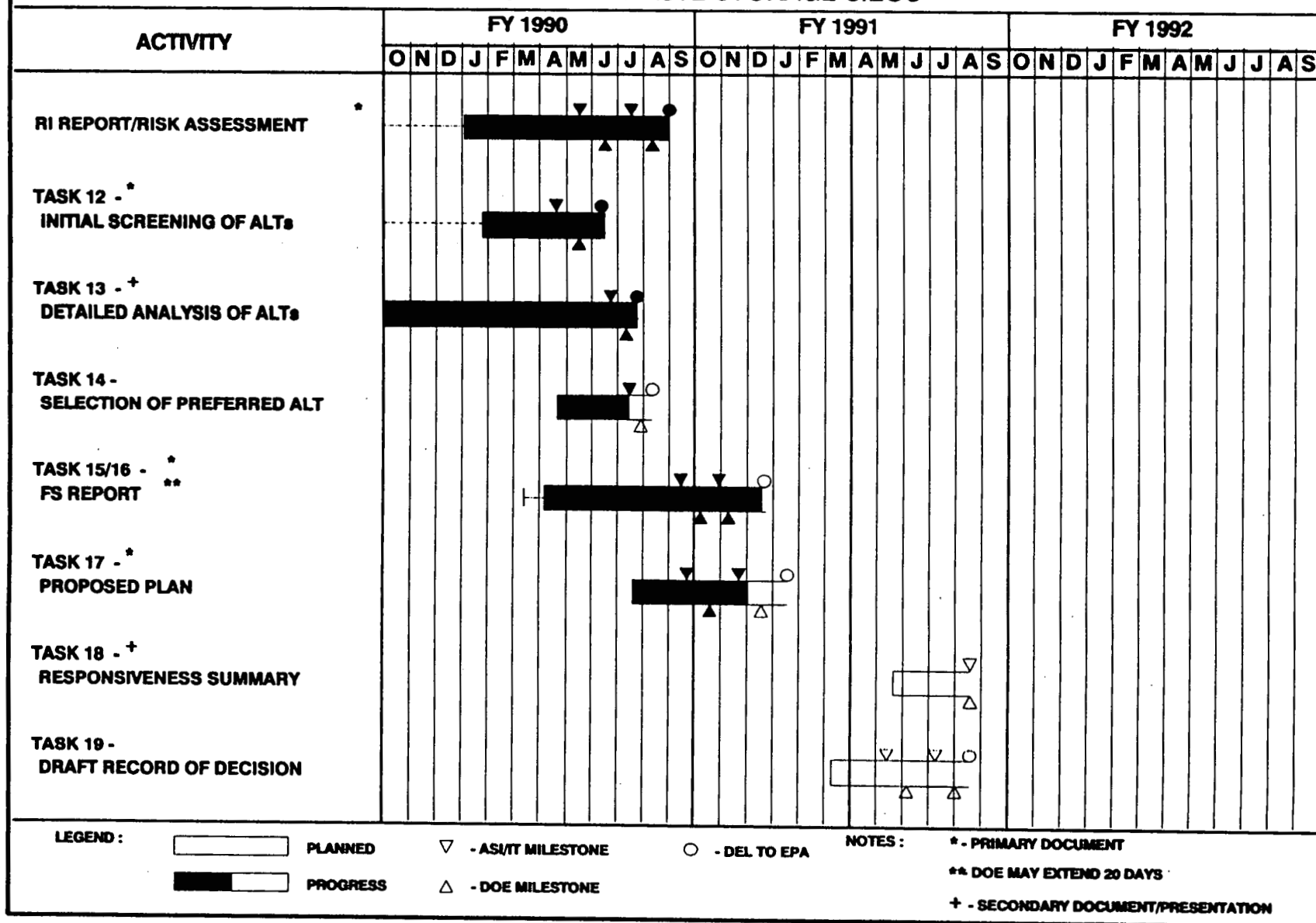
The current hold time is being used to investigate regulatory mechanisms to advance the remedial action.

d. Planned Activities for April 1991

Address any comments received on the Treatability Study Work Plan.

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FMPC RI/FS FFA TRACKING
OPERABLE UNIT 4 - WASTE STORAGE SILOS



* SCHEDULE SUBJECT TO UPDATE

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COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

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Period Ending March 31, 1991

Operable Unit 5: All Environmental Media

5.1 Remedial Investigation

a. Status of Work - Key Milestones

The draft RI Report was submitted in early March for internal review. On March 13, 1991, however, the DOE notified the U.S. EPA of its intention to seek a revision to the Operable Unit 5 primary document delivery schedule based on the need for additional field characterization and pursuant to the provisions of Section XV.B of the Consent Agreement. The report, scheduled for submittal on April 8, 1991, was delayed due to the additional work. The work plan addendum for the Seepage Investigation Plan for Paddy's Run South received conditional approval on September 6, 1990.

Activity

Comment

Issue draft RI Report
to U.S. EPA

Open,
On hold

b. Issues/Problems

The results of additional sampling and analysis are not available for inclusion in the RI Report.

c. Corrective Actions

The Paddy's Run Seepage Investigation will continue and schedules are currently being prepared for revised delivery dates of primary documents.

d. Planned Activities for April 1991

Evaluate the impact from the additional Operable Unit 5 sampling program. Prepare a revised schedule for delivery of the RI Report.

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

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Period Ending March 31, 1991

Operable Unit 5: All Environmental Media

5.2 Feasibility Study

a. Status of Work - Key Milestones

The draft FS report was submitted to the FMPC in late February for internal review during March 1991. On March 20, 1991, however, the DOE informed the U.S. EPA via letter that the due date for submittal of this primary document would require renegotiation based on the additional work required for the Operable Unit 5 RI Report. The added field characterization work impacts both primary and secondary FS documents.

Activity

Comment

Issue Detailed Analysis
of Alternatives/Selection
of Preferred Alternative
to the U.S. EPA

Open,
On hold, additional
characterization
required.

Issue draft Feasibility
Study to the U.S. EPA

Open,
On hold, additional
characterization
required.

b. Issues/Problems

The scheduled submittal dates for the FS documents will not be achieved.

c. Corrective Actions

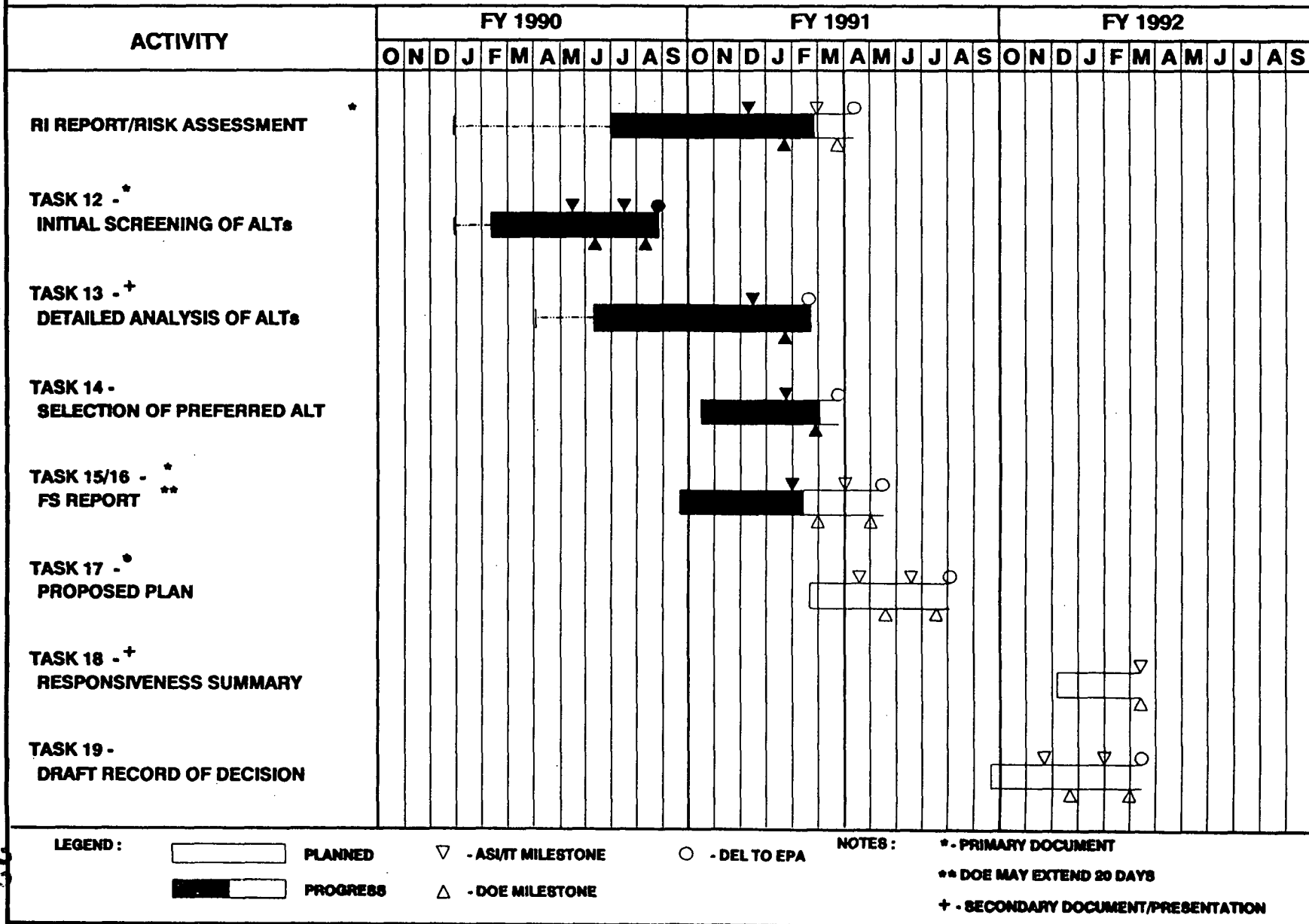
Evaluate the impact of the added field work and prepare revised schedules for negotiation.

d. Planned Activities for April 1991

Prepare revised schedules for the submittal of FS primary and secondary documents.

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FMPC RI/FS FFA TRACKING
OPERABLE UNIT 5 - ENVIRONMENTAL MEDIA



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COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

Period Ending March 31, 1991

RI/FS Community Relations

6.0 RI/FS Community Relations

a. Status of Work

The first 1991 community meeting was held March 19 at The Plantation Restaurant in Harrison, Ohio. The meeting drew the largest community attendance (approximately 70) in the past two years. For this meeting, FMPC personnel used a panel format with the new Site Public Information Officer as moderator. The discussion focused on a potential public water supply for the Fernald-New Baltimore area as well as recently discovered uranium contamination of groundwater. DOE's efforts to further investigate the nature and extent of this contamination and its ongoing efforts to inform residents who reside along that section of Route 128 were also discussed. An update of the RI/FS was presented. Media attention to issues raised at the meeting was minimal.

The second edition of Cleanup Update was mailed to approximately 900 area residents in early March. Key articles included: "Three Instances of Contaminant Release Reported at FMPC"; "U.S. EPA Issues Notices of Violation"; and "Updates on the Five Operable Units." A single-sheet insert containing three questions with answers from past community meetings was included. Copies were hand-carried to local businesses in the Ross area. Twenty copies were delivered to the U.S. EPA. Requests for reprints brought the total distribution to nearly 1200 copies.

The Center for Disease Control's (CDC) Fernald Radiation Dose Reconstruction Project held a community meeting on March 5, 1991. Approximately 25 - 30 community members attended.

The FMPC Community Relations Council decided to continue to coordinate community relations activities at the FMPC through the Site's Public Information Officer.

A meeting was held on March 18 with local residents who reside along Route 128 south of the FMPC to discuss uranium contamination of groundwater recently identified by the FMPC Environmental Monitoring Program.

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COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

Period Ending March 31, 1991

RI/FS Community Relations

6.0 RI/FS Community Relations (cont'd.)

a. Status of Work (cont'd.)

In response to community requests, a copy of the transcript of the Programmatic Environmental Impact Statement scoping meeting held in Cincinnati, Ohio on January 14, 1991 was placed in the Administrative Record and the Harrison Public Library on March 29, 1991.

A presentation was made at the March Fernald Residents for Environment, Safety and Health (FRESH) meeting.

b/c. Problems/Corrective Action

None to report/none required.

d. Planned Activities for April 1991

Follow-up activities stemming from the March 19, 1991 Community Meeting will include the following actions:

- Add new names to the FMPC mailing list.
- Answer community questions.
- Place the transcript of the March 19, 1991 Community Meeting in the Public Environmental Information Center and reading rooms by April 9, 1991.

A presentation to FRESH will be made at their April meeting.

Evaluate the March 1991 Cleanup Update and begin planning the next issue.

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

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Period Ending March 31, 1991

RI/FS Community Relations

6.0 RI/FS Community Relations (cont'd.)

a. Status of Work (cont'd.)

Provide RI/FS information for inclusion in the FMPC Annual
Environmental Report for 1990.

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COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

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Period Ending March 31, 1991

7.0 Field Activities

Surveying Activities

Surveying activities continued during March focusing on establishing the horizontal and vertical coordinates for borings installed during the period. In support of Paddy's Run South Seepage Investigation, surveying activities continued on establishing landowner boundaries for access agreements. Surveying support continued for the K-65 Subsoil (Slant Boring) Investigation to establish drilling angles and drill alignments.

Monitoring Wells Installation

No monitoring wells were installed during March for the RI/FS program. Access agreements for the Pottenger, Century Farms, and CSX Properties were being negotiated between DOE and the landowners. A total of four 2000-series wells remain to be installed in the Paddy's Run Seepage Investigation.

Water Sampling: Monitoring Wells

Groundwater sampling efforts continued in March with 20 wells sampled in the Paddy's Run South Seepage Investigation program. In addition, five surface water samples were collected along Paddy's Run.

Production and Additional Suspect Areas Drilling Program (Facility Testing)

Two piezometers were installed adjacent to the coal pile runoff collection basin: Piezometer 1675 was installed along the east side near the midpoint of the basin and 1676 was installed at the corresponding location on the west side of the basin. No water was encountered during the drilling operations. These piezometers were required to satisfy Ohio EPA Permit-To-Install provisions which require quarterly sampling of these monitoring wells and the reporting of these results in the annual Environmental Monitoring Report (EMR).

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7.0 Field Activities (cont'd.)

Table 1 summarizes the coal pile runoff basin piezometers. Boring logs can be found in Enclosure C.

TABLE 1 FACILITY TESTING

| <u>Boring No.</u> | <u>Date Completed</u> | <u>Depth Drilled (Ft.)</u> | <u>Piezometer Installed Yes/No</u> | <u>Sector No.</u> |
|-----------------------|---------------------------|------------------------------------|--|-----------------------|
| 1675 | 03-08-91 | 20.0 | Yes | 4 |
| 1676 | 03-11-91 | 20.0 | Yes | 4 |

Water Level Measurements: Monitoring Wells and Piezometers

Water levels were taken in 200 monitoring wells and 180 piezometers contained in the FMPC RI/FS.

K-65 Silos Subsoils Sampling Plan

Mock sampling (Task 3.19) was completed in late March and mobilization within the silo area began during the last week of March. The work sampling effort successfully demonstrated the ability to maintain the correct boring angle and allowed the field crew to refine sampling techniques. Drilling and sampling should begin on the Slant Borings in early to mid-April.

K-65 Residue Sampling

Work to repair the Radon Treatment System (RTS) which would allow resumption of the K-65 Silo residue sampling continued during the period. The Work Plan is also being revised to address changes in sampling procedures that will require U.S. EPA approval.

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
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Period Ending March 31, 1991

7.0 Field Activities (cont'd.)

Vertical Sampling

Comments on the Vertical Berm Sampling were received from the Ohio EPA and are being incorporated into the Sampling and Analysis Plan. The U.S. EPA has verbally approved the plan without comment.

The Vibra-Corer and associated equipment are scheduled to arrive from the vendor on/or about April 8, 1991. Field testing will commence immediately thereafter and sampling should begin the week of April 15, 1991.

North Flagpole Suspect Area

During February, the DOE prepared two questionnaires for interviewing former site workers concerning the purported buried structure. One questionnaire was prepared to interview a former site construction worker in order to obtain information necessary to construct a detailed conceptual model of the suspected buried structure. The second questionnaire will be used to interview additional personnel employed at the site during the purported time of construction and burial of the structure. Information gained from the second questionnaire will be used to substantiate or refute the structure's existence. The DOE is currently researching personnel records in order to identify candidates for interviews.

A contract is being prepared for the modeling of the observed magnetic gradients which were defined last summer during the geophysical studies conducted over the suspect area. The results of this modeling effort will be compared to the detailed conceptual model in order to determine if there is a correlation.

An additional outgrowth of the January 30, 1991 meeting on this suspect area is an effort to research various AEC/DOE archives for engineering drawings and/or photographs of this suspected structure. No drawings or reference to any buried structure have been located to date, although an excellent pictorial record of the site has been assembled. The record, however, has a gap in the 1951-1953 period.

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7.0 Field Activities (cont'd.)

North Flagpole Suspect Area (cont'd.)

The efforts detailed above will be integrated in order to determine if a field effort is needed and if necessary, will provide information on how to proceed with that investigation.

8.0 Engineering Disposal Facility (EDF) Site Characterization and Suitability Investigation

a. Status of Work

The preparation of a FMPC on-property site Characterization and Suitability Sampling and Analysis Plan (SAP) is proceeding.

| <u>Activity</u> | <u>Comments</u> |
|---|----------------------|
| Issue draft SAP for the Ohio EPA U.S. EPA review by June 1, 1991 | Open, On schedule |
| Receive Ohio EPA/U.S. EPA comments for incorporation into SAP | July 1, 1991 |
| Issue final SAP to Ohio EPA/U.S. EPA by August 1, 1991 | Open |

b. Issues/Problems

None to report.

c. Corrective Actions

None required.

d. Planned Activities for April 1991

Review existing regional and site databases, identify data short falls, and develop written SAP.

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**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

PERIOD ENDING MARCH 31, 1991

**ENCLOSURE A
WASTEWATER FLOWS AND RADIONUCLIDE
CONCENTRATIONS UNDER CA SECTION XXIII.B**

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

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Period Ending March 31, 1991

Introduction

The accompanying Effluent Radiation Reports provide, in accordance with the requirements of Section XXIII.B of the Consent Agreement under CERCLA Section 120 and 106(a), data on the daily wastewater flows and radionuclide concentrations and loadings released to the Great Miami River and an estimate of runoff and radionuclide concentrations to Paddy's Run during March 1991.

Summary - March 1991

The total quantity of uranium discharged from the FMPC to the Great Miami River via Manhole 175 (Outfall 11000004001) was 51.18 kilograms. The average uranium concentration for the previous 12 months was 0.91 mg/l. This is 102.2 percent of the Derived Concentration Guide (DOE Order 5400.5) for ingested water.

There was no discharge from the Stormwater Retention Basin (Outfall 11000004002) to Paddy's Run via the Storm Sewer Outfall Ditch in March 1991. Based on 4.34 inches of rainfall in March 1991, the total quantity of uranium discharged to Paddy's Run from uncontrolled areas of the FMPC is estimated to be 19.53 kilograms.

February's Increased Uranium Discharge

The DOE has investigated the increased uranium discharged to the Great Miami River (GMR) reported for February 1991. The investigation revealed the following information:

During the period of February 8-11, 1991, the FMPC discharged higher flows than usual. These flows were caused by both increased rainfall and increased process water flow. These increased flows accounted for some of the increased mass loadings to the GMR. The primary cause for the increased mass loading was a failed knife gate valve at Pit 5. This failure, followed by a series of normal operations, led to the increases noted at Manhole 175. The failed valve at Pit 5 caused a higher than normal amount of water and solids to discharge to the Clearwell. These flows, in turn, had to be pumped to the Bionitrification Surge Lagoon (BSL). Monitoring data from the Clearwell discharge indicated that the pumped water contained uranium in higher ranges that ultimately were noted at Manhole 175. Also, these activities presumably disturbed previously settled solids in the BSL.

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

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Period Ending March 31, 1991

February's Increased Uranium Discharge (cont'd.)

It is thought that short-circuiting of the BSL allowed the Clearwell flow to proceed through the Biotenitrification System and subsequently flow to Manhole 175 and the Great Miami River. Thus, the increased uranium discharge to the GMR was caused by a combination of increased flow and a greater than normal concentration of uranium in the discharge. The knife gate valve at Pit 5 has been repaired and the frequency of monitoring the Clearwell discharges has increased. The increased monitoring will allow high uranium concentrations to be discovered in a more timely manner.

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

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Period Ending March 31, 1991

Wastewater Flows and Radionuclide Concentrations

FACILITY: Feed Materials Production Center, U.S. Department of Energy
7400 Willey Road, P.O. Box 398704
Cincinnati, Ohio 45239 Hamilton
9002 M 9501 900212

LOCATION: 11000004001; 001 Total Discharge
Manhole 175 (Effluent to Great Miami River)

MONTH: March 1991

| <u>Day</u> | <u>Flow (MGD)</u> | <u>Total Alpha (pCi/l)</u> | <u>Total Beta (pCi/l)</u> | <u>Total U (mg/l)</u> | <u>Total U (kgs)</u> | <u>Calculated Total U-238 (pCi/l) (1)</u> |
|------------|-----------------------|------------------------------------|-----------------------------------|---------------------------|--------------------------|---|
| 1 | 0.592 | 365 | 239 | 0.76 | 1.70 | 257 |
| 2 | 0.300 | 383 | 302 | 1.00 | 1.13 | 338 |
| 3 | 0.284 | 500 | 297 | 0.92 | 0.99 | 311 |
| 4 | 0.364 | 302 | 392 | 0.64 | 0.88 | 216 |
| 5 | 0.358 | 297 | 234 | 0.56 | 0.76 | 189 |
| 6 | 0.295 | 230 | 113 | 0.60 | 0.67 | 203 |
| 7 | 0.235 | 383 | 113 | 0.64 | 0.57 | 216 |
| 8 | 0.251 | 302 | 99 | 0.62 | 0.59 | 209 |
| 9 | 0.174 | 351 | 153 | 0.70 | 0.46 | 236 |
| 10 | 0.202 | 207 | 99 | 0.32 | 0.24 | 108 |
| 11 | 0.248 | 189 | 68 | 0.32 | 0.30 | 108 |
| 12 | 0.477 | 230 | 86 | 0.52 | 0.94 | 176 |
| 13 | 0.914 | 383 | 122 | 0.44 | 1.52 | 149 |
| 14 | 1.272 | 450 | 104 | 0.54 | 2.60 | 182 |
| 15 | 1.129 | 450 | 207 | 0.66 | 2.82 | 223 |
| 16 | 1.183 | 374 | 108 | 0.62 | 2.77 | 209 |
| 17 | 1.130 | 432 | 117 | 0.76 | 3.25 | 257 |
| 18 | 1.217 | 441 | 153 | 0.68 | 3.13 | 230 |
| 19 | 1.276 | 324 | 153 | 0.66 | 3.19 | 223 |
| 20 | 0.969 | 392 | 90 | 0.62 | 2.27 | 209 |
| 21 | 0.393 | 275 | 149 | 0.58 | 0.86 | 196 |
| 22 | 1.377 | 279 | 77 | 0.54 | 2.81 | 182 |
| 23 | 1.294 | 387 | 162 | 0.62 | 3.03 | 209 |
| 24 | 1.228 | 342 | 72 | 0.66 | 3.07 | 223 |
| 25 | 1.222 | 297 | 113 | 0.28 | 1.29 | 95 |
| 26 | 1.324 | 149 | 59 | 0.33 | 1.65 | 111 |
| 27 | 1.431 | 212 | 153 | 0.39 | 2.11 | 132 |
| 28 | 1.223 | 297 | 135 | 0.39 | 1.80 | 132 |
| 29 | 1.006 | 212 | 104 | 0.40 | 1.52 | 135 |
| 30 | 0.337 | 189 | 131 | 0.36 | 0.46 | 122 |
| 31 | 1.146 | 261 | 81 | 0.41 | 1.78 | 139 |
| | ----- 24.851 | | | | ----- 51.18 | |

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
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Period Ending March 31, 1991

Wastewater Flows and Radionuclide Concentrations (cont.)

FACILITY: Feed Materials Production Center

LOCATION: 001 Total Discharge

MONTH: March 1991

| | <u>Flow</u> <u>(MGD)</u> | <u>Total</u> <u>Alpha</u> <u>(pCi/l)(2)</u> | <u>Total</u> <u>Beta</u> <u>(pCi/l)(2)</u> | <u>Total U</u> <u>(mg/l)(2)</u> | <u>Total U</u> <u>(kgs)</u> | <u>Calculated</u> <u>Total U-238</u> <u>(pCi/l)(1)(2)</u> |
|------|-----------------------------|---|--|------------------------------------|--------------------------------|---|
| Avg. | 0.802 | 326 | 130 | 0.54 | 1.65 | 184 |
| Max. | 1.431 | 500 | 392 | 1.00 | 3.25 | 338 |
| Min. | 0.174 | 149 | 59 | 0.28 | 0.24 | 95 |

The average uranium concentration for the previous 12 months was 0.91 mg/l. This is 102.2 percent of the Derived Concentration Guide (DOE Order 5400.5) for ingested water.

Comments: (1) The calculated total U-238 is based on a conversion factor of 337.84 pCi U-238/mg Total U applied to the measured value of total uranium.

(2) Average values presented are flow-weighted.

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Wastewater Flows and Radionuclide Concentrations (cont.)

FACILITY: Feed Materials Production Center, U.S. Department of Energy
7400 Willey Road, P.O. Box 398704
Cincinnati, Ohio 45239 Hamilton
9002 M 9501 900212

LOCATION: 11000004002, 002 Discharge (Overflow) to Storm Sewer Outfall Ditch
Stormwater Retention Basin Spillway (Effluent to Paddy's Run)

MONTH: March 1991

There was no discharge to Paddy's Run from the Stormwater Retention Basin.

Based on 4.34 inches of rainfall in March 1991, the uranium discharge to Paddy's Run from uncontrolled areas of the FMPC is estimated to be 19.53 kgs.

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**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT**

PERIOD ENDING MARCH 31, 1991

ENCLOSURE B

**FFCA: INITIAL REMEDIAL MEASURES
AND OTHER OPEN ACTIONS**

CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
COMPLIANCE AGREEMENT MONTHLY PROGRESS REPORT

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Period Ending March 31, 1991

INTRODUCTION

Enclosure B describes actions undertaken at the Feed Materials Production Center (FMPC) during the period March 1 through March 31, 1991 that are not covered by the reporting requirements of the Consent Agreement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120 and 106(a).

WORK ASSIGNMENTS AND PROGRESS

Descriptions of ongoing work progress are presented in the following sections of this report. The status of ongoing work in support of the Federal Facility Compliance Agreement (FFCA) is summarized in Table 1 of Enclosure B. Completed work previously reported upon has been eliminated for brevity sake. In this portion of the report and in Table 1, descriptions of actions are presented in a format consistent with that of the FFCA.

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND
LIABILITY ACT (CERCLA)**

1. Initial Remedial Measures

Section C

K-65 Silo Project - Work to repair the Radon Treatment System (RTS) which would allow the resumption of K-65 Silo residue sampling continued during the period. The work plan is also being revised to address changes in sampling procedures that will require U.S. EPA approval.

2. Remedial Investigation/Feasibility Study (RI/FS)

Status information on the Remedial Investigation/Feasibility Study (RI/FS) normally reported in this section is being provided separately in accordance with the requirements of Section X of the Consent Agreement under CERCLA Section 120 and 106(a).

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY
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Period Ending March 31, 1991

**COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND
LIABILITY ACT (CERCLA) (cont'd.)**

3. Reports and Record Keeping

Section B

The RI/FS Monthly Technical Progress Report for January 1990 was transmitted to the U.S. EPA on March 20, 1991 as an integral part of the Consolidated Consent Agreement/Federal Facility Compliance Agreement (CA/FFCA) Monthly Progress Report in accordance with requirements of Section X of the Consent Agreement.

CLEAN AIR ACT (CAA)

Section E

The seventeenth Quarterly Particulate Emissions Report for the period October 5, 1990 through January 4, 1991 was submitted to the U.S. EPA on March 8, 1991.

RADIATION DISCHARGE INFORMATION

Section A

The seventeenth Quarterly Liquid Discharge Report for the period October through December 1990 was submitted to the U.S. EPA on March 8, 1991.

REPORTING REQUIREMENTS

Section B

The Federal Facilities Compliance Agreement Monthly Progress Report for January 1991 was transmitted to the U.S. EPA on March 20, 1991 as Enclosure B of the Consolidated Consent Agreement/Federal Facility Compliance Agreement (CA/FFCA) Monthly Progress Report.

TABLE 1

**STATUS OF ASSIGNMENTS FOR WORK REQUIRED ON
FEDERAL FACILITY COMPLIANCE AGREEMENT ACTIONS**

**STATUS OF ACTIONS AS OF
MARCH 31, 1991**

| ACTION | DESCRIPTION | COMPLETION TIME AFTER FFCA SIGNED | FY91 STATUS |
|----------------------|---|---|---|
| CERCLA | | | |
| 1. | INITIAL REMEDIAL MEASURES | | |
| 1.C | Implement radon control plan approved by the U.S. EPA. | ----- | No longer applicable. Progress on actions to address radon emissions from the K-65 Silos are being reported separately under Section IX-Removal Actions of the Consent Agreement/FFCA Monthly Progress Report. |
| 2. | REMEDIAL INVESTIGATION/FEASIBILITY STUDY | | No action required. |
| 2.A | RI/FS work is to be conducted in accordance with the U.S. EPA guidelines. | N/A | |
| 2.B | -- No Action Required -- | ----- | Status information on the RI/FS is being reported in accordance with the requirements of Section X of the Consent Agreement under CERCLA Section 120 and 106(a). |
| 2.E | Amend and submit revised RI/FS Work Plan to U.S. EPA if deficiencies are found. | | Status information on the RI/FS is being reported in accordance with the requirements of Section X of the Consent Agreement under CERCLA Section 120 and 106(a). |
| 2.F | Implement tasks described in the approved RI/FS Work Plan. | | Status information on the RI/FS is being reported in accordance with the requirements of Section X of the Consent Agreement under CERCLA Section 120 and 106(a). |
| 3. | REPORTS AND RECORD KEEPING | | |
| 3.B | Submit monthly RI/FS progress reports. | monthly | The RI/FS Monthly Progress Report for February 1991 was transmitted to the U.S. EPA on March 20, 1991 (DOE-959-91). |
| CLEAN AIR ACT | | | |
| B.4 | Prepare annual progress report on installation and replacement of emission control devices. | yearly | The Third Annual Progress Report on installation and replacement of emission control devices was transmitted to the U.S. EPA on February 22, 1990 (DOE-617-90). |
| C. | Provide annual reports to U.S. EPA per 40 CFR 61.94(c). | yearly | The Annual NESMAP Compliance Report for CY 1989 was transmitted to the U.S. EPA on July 9, 1990 (DOE-1392-90). |
| D.1 | Provide U.S. EPA with yearly stack-testing schedule. | yearly | The 1989 stack testing schedule was transmitted to U.S. EPA on June 16, 1989. A letter (DOE-1615-89) was transmitted to the U.S. EPA on September 15, 1989 indicating that due to the uncertainty concerning resumption of production at the FMPC, the 1989 FFCA Stack Testing Program was being deferred. Notification of future stack testing dates will be provided to the U.S. EPA if and when a decision on the restart of facilities at the FMPC is made. |
| D.2 | Provide U.S. EPA with stack-test results for stacks tested that year. | 45 days | Stack testing is currently on hold pending resumption of manufacturing operations. Notification of future stack testing dates will be provided to the U.S. EPA if and when a decision on the restart of production activities at the FMPC is made. |

TABLE 1

**STATUS OF ASSIGNMENTS FOR WORK REQUIRED ON
FEDERAL FACILITY COMPLIANCE AGREEMENT ACTIONS**

**STATUS OF ACTIONS AS OF
MARCH 31, 1991**

| ACTION | DESCRIPTION | COMPLETION TIME AFTER FFCA SIGNED | FY91 STATUS |
|--------|---|---|--|
| E.1 | Maintain records of monthly particulate matter emissions. | ----- | Continuing. |
| E.2 | Provide quarterly reports to U.S. EPA on these emissions. | quarterly | The seventeenth Quarterly Particulate Emissions Report for the period October 5, 1990 through January 4, 1991 was submitted to the U.S. EPA March 8, 1991 (DOE-773-91). The sixteenth Quarterly Particulate Emissions Report for the period July 3, 1990 through October 3, 1990 was transmitted to the U.S. EPA on December 31, 1990. (DOE-112-91). |
| RCRA | | | |
| A.1 | Conduct a hazardous waste determination on all waste streams. | 30 days | Pursuant to the amended Consent Decree, a RCRA waste evaluation will be conducted on all site materials by 10/92. |
| A.2 | Commence a hazardous waste analysis program for materials in the landfill and going to the incinerator. | 30 days | Complete. Operations of these units was discontinued and data on the waste which had gone to them was provided in a 30-day FFCA deliverable on August 17, 1986. However, further review of both the waste streams and the potential of the units to be hazardous waste management units are being evaluated as actions required by the amended Consent Decree. Final results are due October 30, 1992. |
| A.5 | Update the facility closure plan to reflect the year the facility expects to begin closure. | 30 days | The Facility closure date is dependent upon closure schedules for individual TSD units as presented most recently in Section 1 of the RCRA Part B Permit Application submitted to the U.S. EPA on September 22, 1989. Facility closure will be completed on the date the last TSD unit is closed. |

TABLE 1

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**STATUS OF ASSIGNMENTS FOR WORK REQUIRED ON
FEDERAL FACILITY COMPLIANCE AGREEMENT ACTIONS**

**STATUS OF ACTIONS AS OF
MARCH 31, 1991**

| ACTION | DESCRIPTION | COMPLETION TIME AFTER FFCA SIGNED | FY91 STATUS |
|--|--|---|--|
| RADIATION DISCHARGE INFORMATION | | | |
| A.3 | Report to U.S. EPA, Ohio EPA and Ohio Department of Health the results of the continuous liquid discharge samples. | quarterly | The seventeenth Quarterly Liquid Discharge Report for the period October through December 1990 was transmitted to the U.S. EPA on March 8, 1991 (DOE-773-91). The sixteenth Quarterly Liquid Discharge Report for the period July through September, 1990 was transmitted to the U.S. EPA on December 31, 1990. (DOE-112-91) |
| REPORTING REQUIREMENTS | | | |
| B. | Issue monthly progress report of actions taken to ensure compliance with FFCA requirements. | monthly | December's FFCA Monthly Progress Report was transmitted to the U.S. EPA on March 20, 1991 (DOE-959-91). |